

373086

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

SUBJECT: De maximus PRP Analysis

DATE: 10/21/97

FROM: Heather Gray Torres

HGT

TO: Malvern Team

Enforcement Confidential/
ATTORNEY-CLIENT PRIVILEGE

CONFIDENTIAL

Attached is your copy (CONFIDENTIAL, of course) of ORC law clerk Michael Walter's comprehensive de maximus PRP analysis for the Malvern site. This document was recently mailed to the Department of Justice, to complete our PRN process for this site.

As you can see from the document, Mike has succeeded in compiling a thorough, easy to reference and comprehensive liability summary for the currently suggested de maximus PRPs for this Site, which will be very valuable for us as we embark upon remedy negotiations. It provides us all easy access to key PRP liability information for this Site. Plus, I think it is so successfully organized that it could serve as a model for other sites as well.

Please let Joan A. Johnson, Mike or me know if you have any comments about this analysis.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

SUBJECT: Arranger Liability

DATE: 10/3/97

FROM: Michael Walters, Law Clerk

Enforcement Confidential/
ATTORNEY-CLIENT PRIVILEGE

TO: Joan A. Johnson, Assistant Regional Counsel (3RC21)

CONFIDENTIAL

This memorandum summarizes the legal reasoning and evidence supporting the de maximus PRP's liability for response costs at the Malvern TCE Superfund Site. Under CERCLA, "any person who by contract, agreement or otherwise arranged for disposal ... of hazardous substances owned or possessed by such person ... at any facility owned or operated by another party or entity and containing such hazardous substances," § 9607(a)(3), "shall be liable for all costs of removal or remedial action incurred by the United States Government ... not inconsistent with the national contingency plan." § 9607(a)(4)(A).

I. Site Operations and Relevant Legal Theories

In Malvern, some of the transactions are straightforward

arrangements for disposal. In others the hazardous waste was sent or sold to Chemclene for reclamation. The parties which engaged in straightforward arrangements for disposal are liable for response costs at Malvern. Under CERCLA § 9607(a)(3), the only required nexus between a party and the site is that the party have disposed of their waste at the site and that the hazardous substances found in the defendant's waste are also found at the site. United States v. Wade, 577 F.Supp. 1326, 1333 (E.D.Pa. 1983).

In the second situation, in which parties sold their waste solvents to Chemclene for reclamation, two tests have been used to determine arranger liability, the "crucial decision" test and the "useful products" test. Under the "crucial decision" test, arranger liability may be found where a defendant sells its hazardous waste substances and "makes the crucial decision" on how its substances are disposed of or treated. United States v. Pesses, 794 F.Supp. 151, 156 (W.D.Pa. 1991); Jersey Redevelopment Authority v. PPG Industries, 665 F.Supp. 1257, 1260 (D.N.J. 1987), aff'd. 866 F.2d 1411 (3rd Cir. 1988).

In Pesses, Metcoa obtained scrap that was not usable for its intended purpose, whereupon it would process the scrap so as to make it productive. Id. The defendants, parties who sent scrap metal to Metcoa, argued that they did not arrange for the

disposal of hazardous substances at the site. Id. Rather, they sold and/or sent valuable scrap metal which the operator of the site used as raw material in its manufacturing process or for resale. Id.

The Pesses Court held that although defendants primary purpose in selling scrap material may have been to make a profit, the intent to dispose is not a requirement under CERCLA. The relevant inquiry is who decided to place the material into the hands of a facility containing hazardous substances. Since all of the defendants had sent scrap materials to Metcoa which necessarily required processing in order to be productively used, they "arranged" for the disposal of hazardous substances. The Court concluded that Metcoa's processing of scrap materials constituted a "disposal" under CERCLA, since the processing created wastes which were "disposed" of on the land. Id.

Moreover, the Pesses court determined that Metcoa processed scrap materials which it received so as to make alloys. Id. at 157. Under CERCLA, Metcoa's processing constitutes "treatment" because it necessarily acted to:

... change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume.

42 U.S.C. § 6903(34). Likewise, in the present case, evidence

shows that Chemclene processed "waste" hazardous substances as so as to render such waste amenable for recovery. Thus, Chemclene's processing of "waste" hazardous substances constitutes "treatment" under CERCLA.

Under the "useful products" test, "arranger" liability depends upon examining the transaction to see if it involved the sale of a product rather than a disposal arrangement. United States v. Maryland Sand, Gravel and Stone Company, 1994 U.S. Dist. LEXIS 14035 (D.Md. 1994). If the transaction involves the sale of hazardous substance merely to "get rid of it," as opposed to the sale of a new useful product containing a hazardous substance, then "arranger" liability will attach. Id.

In Maryland Sand, the Maryland Sand, Gravel and Stone Company ("MSGSC") excavated pits on its property into which it permitted third parties to deposit industrial wastes. Id. MSGSC allowed Galaxy Chemicals, an industrial solvent "processor," to dump residues in its recycling business into the excavated pits. Id. Galaxy was in the business of recovering chemical solvents from industrial wastes. Id. Galaxy received spent solvents directly from generators, and from "middlemen," who had collected industrial wastes from the Generator-Defendants. Id. As a by-product of its operation, Galaxy produced a residue known as "stillbottom," which contains hazardous solvents. Id. Galaxy

deposited these stillbottoms at the site. Id.

In MSGSC, the Generator-Defendants argued that they were not liable under § 9607(a)(3) because they did not arrange for disposal at the site. The Court held that in determining the scope of CERCLA's "arranger" liability, the proper analysis is the "useful products" doctrine, not the "crucial decision" test. Id. Applying the "useful products" test, the Court determined that the Generator-Defendants generated toxic substances as by-products of their primary manufacturing operations; and although they sold these industrial wastes to "middlemen" that may have made the "crucial decision" to deposit them at the site, the Generator-Defendants are still liable under § 9607(a)(3).

II. Detailed Description of Liability

The following is a list of de maximus parties which are liable for response costs at Malvern under § 107(a)(3), the theory of liability, and the evidence establishing their liability. This analysis shows how the parties are liable because they arranged for disposal or treatment, or both, at the site.¹

¹ EPA does not have PRP-specific evidence regarding sloppy waste-handling during on-site treatment. However, we have general information as to Chemcene's practices.

List of De-Maximus PRPs at Malvern

A.S. Koch and Sons

Alcoa

Armstrong Cork Company

Aydin

Beckett Corporation

Burroughs Corporation

Cyprus Foote Mineral Company

Delbar Products

Donn Corporation

Fischer & Porter Company

General Electric

General Motors Corporation

Hamilton Precision Metals

Hamilton Technology

Hamilton Watch Company

Handy & Harman Tube Company

Hercules Aerospace Display Systems, Inc.

John Evans & Sons

Kawecki Berylco

Kim Manufacturing

LaFrance Precision

Morning Call

NW Controls

Plymouth Tube

Porter Instruments

Quaker City Chemicals

Reilly Plating Company, Inc.

Resource Technology Services, Inc.

SKF Industries

Samuel Miller and Sons

Simon Wrecking Company

Star Dental Corporation

Vishay Resistive Systems

VIZ Manufacturing Corporation

Western Electric

- A. **A.S. Koch and Sons ("A.S. Koch"):** Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * A.S. Koch sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #5525 (1/14/75) [A-1]: A.S. Koch paid Chemclene \$91.00 for the removal and disposal of 13 drums of junk oil.
- * Evidence reflects approximately 14 other similar transactions.

(2) Arranger because:

- * A.S. Koch sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Invoice #5525 (1/14/75) [A-1]: A.S. Koch sold 2 drums of waste 1,1,1-trichloroethane to Chemclene. Chemclene recovered 440 lbs. A.S.Koch received \$13.19 credit from Chemclene.
- * Invoice suggests processing.
- * Evidence reflects approximately 11 other similar transactions.

(3) Arranger because:

- * A.S. Koch sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Invoice #5525 (1/14/75) [A-1]: A.S. Koch sold 2 drums of waste 1,1,1-trichloroethane to Chemclene. Chemclene recovered 440 lbs. A.S.Koch received \$13.19 credit from Chemclene.
- * Invoice suggests processing.
- * Evidence reflects approximately 11 other similar transactions.

B. Alcoa: Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Alcoa sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8335 (1/16/81) [B-1]: Alcoa paid Chemclene \$850.00 for the removal and disposal of 10 drums of chlorinated still bottoms.
- * Evidence reflects two other similar transactions.
- * Other hazardous substances include: waste Freon, waste methylene chloride,

(2) Arranger because:

- * Alcoa sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Receipt (5/20/77) [B-2]: Alcoa sold 22 drums (11,550 lbs.) of waste trichlorethylene to Chemclene. Alcoa received a check (#8709) in the amount of \$115.50 from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 10 other similar transactions.

(3) Arranger because:

- * Alcoa sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (5/20/77) [B-2]: Alcoa sold 22 drums (11,550 lbs.) of waste trichlorethylene to Chemclene. Alcoa received a check (#8709) in the amount of \$115.50 from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 10 other similar transactions.

- C. **Armstrong Cork Company ("Armstrong"):** Arranged for both processing and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * Armstrong sent hazardous substances to Chemcene to be disposed of at the site. Wade.

Evidence:

- * Reclamation Report (3/9/78) (attached to Chemcene Invoice #7002) [C-1]: Armstrong paid Chemcene \$874.80 for reclamation of hazardous substances. Armstrong sent approximately 1,100 gallons of waste 1,1,1-Trichloroethane to Chemcene, of which 810 gallons were recovered.
- * Invoice suggests processing.
- * Evidence reflects approximately 25 other similar transactions.

(2) Arranger because:

- * Armstrong sent hazardous substances to Chemcene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Reclamation Report (3/9/78) (attached to Chemcene Invoice #7002) [C-1]: Armstrong paid Chemcene \$874.80 for reclamation of hazardous substances. Armstrong sent approximately 1,100 gallons of waste 1,1,1-Trichloroethane to Chemcene, of which 810 gallons were recovered.
- * Invoice suggests processing.
- * Evidence reflects approximately 25 other similar transactions.

D. **Aydin:** Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Aydin sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Invoice #10290 (3/8/82) [D-1]: Aydin paid Chemclene \$215.00 (\$35/drum, \$20/pail) for "processing and disposal" of one drum and nine 5 gallon pails of waste 1,1,1-trichloroethane.
- * Evidence reflects approximately 63 other invoices describing similar transactions.
- * Other hazardous substances include: trichlorethylene, trichloroethane, methanol, acetone, xylene.

(2) Arranger because:

- * Aydin sent hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Invoice #10290 (3/8/82) [D-1]: Aydin paid Chemclene \$215.00 (\$35/drum, \$20/pail) for "processing and disposal" of one drum and nine 5 gallon pails of waste 1,1,1-trichloroethane.
- * Evidence reflects approximately 63 other invoices describing similar transactions.
- * Other hazardous substances include: trichlorethylene, trichloroethane, methanol, acetone, xylene.

E. Beckett Corporation ("Beckett"): Arranged for disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Beckett sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #15582 (4/17/89) [E-1]: Beckett paid Chemclene \$2,195.75.00 for the disposal of 4 drums of waste perchloroethylene, butyl alcohol and rubber; 3 drums of waste ethylene, glycol, monoethyl, ether and denatured alcohol; and 16 gallons of solids.
- * Evidence reflects approximately 34 other similar transactions.
- * Other hazardous substances include: waste alcohol and cellosolve, waste mixed flammable, waste methylene chloride, PCE.

- F. **Burroughs Corporation ("Burroughs"):** Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * Burroughs sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemical Invoice #11061 (1/25/83) [F-1]: Burroughs paid Chemclene \$60.00 for the disposal of 1 drum of waste phosphoric acid.
- * Evidence reflects approximately 24 other similar transactions.
- * Other hazardous substances include: 1,1,1-trichloroethane, nitromethane, waste flux oil, waste lure oil

(2) Arranger because:

- * Burroughs sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Receipt (1/17/78) [F-2]: Burroughs sold 5 drums (2,575 lbs.) of waste 1,1,1-trichloroethane to Chemclene. Chemclene recovered 1,734 lbs. Burroughs received a check (#9050) in the amount of \$52.03 from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 25 other similar transactions.

(3) Arranger because:

- * Burroughs sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (1/17/78) [F-2]: Burroughs sold 5 drums (2,575 lbs.) of waste 1,1,1-trichloroethane to Chemclene. Chemclene recovered 1,734 lbs. Burroughs received a check (#9050) in the amount of \$52.03 from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 25 other similar transactions.

G. Cyprus Foote Mineral Company ("Cyprus"): Arranged for disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Cyprus sent hazardous substances to Chemcene to be disposed of at the site. Wade.

Evidence:

- * Chemcene Invoice #17418 (3/13/92): Cyprus paid Chemcene \$738.75 for the removal and disposal of 5 drums of waste Hexane at the site.
- * Evidence reflects approximately 65 other similar transactions.
- * Other hazardous substances: waste mineral oil.

H. **Delbar Products ("Delbar"):** Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Delbar sent hazardous substances to Chemcene to be disposed of at the site. Wade.

Evidence:

- * Chemcene Invoice #8450 (3/20/81) [H-1]: Delbar paid Chemcene \$1,342.00 for "processing and disposal" of 22 drums of waste trichlorethylene.
- * Invoice suggests processing.
- * Evidence reflects approximately 22 other similar transactions.
- * Other hazardous substances include: perchlorethylene, waste paint and thinner.

(2) Arranger because:

- * Delbar sent hazardous substances to Chemcene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemcene Invoice #8450 (3/20/81) [H-1]: Delbar paid Chemcene \$1,342.00 for "processing and disposal" of 22 drums of waste trichlorethylene.
- * Invoice suggests processing.
- * Evidence reflects approximately 22 other similar transactions.
- * Other hazardous substances include: perchlorethylene, waste paint and thinner.

I. **Donn Corporation ("Donn"):** Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Donn sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #14481 (7/28/87) [I-1]: Donn paid Chemclene \$3,894.80 to remove 14 drums of waste methylene chloride, methanol and oil for "processing and/or disposal."
- * Invoice suggests processing.
- * Evidence reflects approximately 11 other similar transactions.
- * Other hazardous substances include: waste cool-phos, still bottoms.

(2) Arranger because:

- * Donn sent hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Invoice #14481 (7/28/87) [I-1]: Donn paid Chemclene \$3,894.80 to remove 14 drums of waste methylene chloride, methanol and oil for "processing and/or disposal."
- * Invoice suggests processing.
- * Evidence reflects approximately 11 other similar transactions.
- * Other hazardous substances include: waste cool-phos, still bottoms.

J. **Fischer & Porter Company ("Fischer")**: Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * Fischer sent hazardous substances to Chemclene to be disposed of at the site. Wade.
- * Chemclene Invoice #8207 (10/28/80) [J-1]: Fischer paid Chemclene \$168.00 to remove 6 drums of waste trichlorethylene and 2 drums of waste 1-1-1 trichloroethane for reclamation/disposal.
- * Evidence reflects approximately 74 other similar transactions.

(2) Arranger because:

- * Fischer sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene receipt (3/6/80) (attached to Chemclene Invoice 7907) [J-2]: Fischer sold 5 drums (2,595 lbs.) of dirty trichlorethylene to Chemclene. Chemclene recovered 2,118 lbs. Fischer received \$63.55 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 32 other similar transactions.

(3) Arranger because:

- * Fischer sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene receipt (3/6/80) (attached to Chemclene Invoice 7907) [J-2]: Fischer sold 5 drums (2,595 lbs.) of dirty trichlorethylene to Chemclene. Chemclene recovered 2,118 lbs. Fischer received \$63.55 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 32 other similar transactions.

K. **General Electric:** Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * General Electric sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #7875 (2/12/80) [K-1]: General Electric sent 7 drums of waste 1,1,1-trichloroethane to Chemclene for disposal.

(2) Arranger because:

- * General Electric sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site.

Evidence:

- * Chemclene receipt (4/3/81) [K-2]: General Electric sold 14 drums of waste 1,1,1-trichloroethane to Chemclene of which Chemclene recovered 7,046 lbs. As a result of the processing, 2 still bottoms remained at Chemclene. General Electric received \$211.38 from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 13 other similar transactions.

(3) Arranger because:

- * General Electric sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene receipt (4/3/81) [K-2]: General Electric sold 14 drums of waste 1,1,1-trichloroethane to Chemclene of which Chemclene recovered 7,046 lbs. As a result of the processing, 2 still bottoms remained at Chemclene. General Electric received \$211.38 from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 13 other similar transactions.

- L. General Motors Corporation ("General Motors"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * General Motors sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Receipt (7/22/77) [L-1]: General Motors sold 22 drums (13,210 lbs.) of waste 1,1,1-trichloroethane to Chemclene. General Motors received a check (#9793) in the amount of \$26.69 from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 25 other similar transactions.

(2) Arranger because:

- * General Motors sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (7/22/77) [L-1]: General Motors sold 22 drums (13,210 lbs.) of waste 1,1,1-trichloroethane to Chemclene. General Motors received a check (#9793) in the amount of \$26.69 from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 25 other similar transactions.

M. **Hamilton Precision Metals ("Hamilton Precision")**: Arranged for disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Hamilton Precision sent hazardous substances to Chemcene to be disposed of at the site. Wade.

Evidence:

- * Chemcene Invoice #8848 (9/30/81) [M-1]: Hamilton Precision paid Chemcene \$285.00 for the removal and disposal of 1 drum of sodium cyanide and 7 drums of waste oil.
- * Evidence reflects approximately 51 other similar transactions.
- * Other hazardous substances include: waste acid NOS, 1,1,1-trichloroethane, waste acid, waste pickle liquer.

N. **Hamilton Technology:** Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Hamilton Technology sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8514 (4/22/81) [N-1]: Hamilton Technology paid Chemclene \$280.60 to remove 11 drums of waste oil and 4 still bottoms for disposal.
- * Evidence reflects approximately 43 other similar transactions.
- * Other hazardous substances include: waste oil, waste flammable mixture, waste ethanol, waste Freon, and waste acetone.

(2) Arranger because:

- * Hamilton Technology sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene receipt (3/3/80) (attached to Chemclene Invoice # 7892) [N-2]: Hamilton Technology sold 3 drums (1,460 lbs.) of waste 1,1,1-trichloroethane and 7 drums (3,580 lbs.) of waste trichlorethylene to Chemclene. Chemclene recovered 480 lbs. of 1,1,1-trichloroethane and 1,162 lbs. of trichlorethylene. Hamilton Technology received \$65.68 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects approximately 41 other similar transactions.

(3) Arranger because:

- * Hamilton Technology sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene receipt (3/3/80) (attached to Chemclene Invoice # 7892) [N-2]: Hamilton Technology sold 3 drums (1,460 lbs.) of waste 1,1,1-trichloroethane and 7 drums (3,580 lbs.) of waste trichlorethylene to Chemclene. Chemclene recovered 480 lbs. of 1,1,1-trichloroethane and 1,162 lbs. of trichlorethylene. Hamilton Technology received \$188.61 credit from

Chemclene.

- * Receipt suggests processing.
- * Evidence reflects approximately 41 other similar transactions.

- O. Hamilton Watch Company ("Hamilton Watch"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * Hamilton Watch sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene receipt (6/21/77) [O-1]: Hamilton Watch sold 11,179 lbs. (23 drums) of trichlorethylene to Chemclene. Chemclene recovered 6,969 lbs. Hamilton Watch received a check (#8757) for \$209.07.
- * Receipt suggests processing.
- * Evidence reflects approximately 45 other similar transactions.

(2) Arranger because:

- * Hamilton Watch sent hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene receipt (6/21/77) [O-1]: Hamilton Watch sold 11,179 lbs. (23 drums) of trichlorethylene to Chemclene. Chemclene recovered 6,969 lbs. Hamilton Watch received a check (#8757) for \$209.07.
- * Receipt suggests processing.
- * Evidence reflects approximately 45 other similar transactions.

P. **Handy & Harman Tube Company ("Handy"):** Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * Handy sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #11565 (9/29/83) [P-1]: Handy paid Chemclene \$360.00 to remove 12 drums of waste trichloroethylene for processing and disposal.
- * Invoice suggests processing.
- * Evidence reflects approximately 16 other similar transactions.

(2) Arranger because:

- * Handy sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses

Evidence:

- * Chemclene receipt (4/26/80) [P-2]: Handy sold 14 drums (7,280 lbs.) of waste trichlorethylene to Chemclene. Chemclene recovered 3,994 lbs. Handy received a check (#10276) in the amount of \$119.83.
- * Receipt suggests processing.
- * Evidence reflects two other similar transactions.

(3) Arranger because:

- * Handy sent hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene receipt (4/26/80) [P-2]: Handy sold 14 drums (7,280 lbs.) of waste trichlorethylene to Chemclene. Chemclene recovered 3,994 lbs. Handy received a check (#10276) in the amount of \$119.83.
- * Receipt suggests processing.
- * Evidence reflects two other similar transactions.

Q. Hercules Aerospace Display Systems, Inc. ("Hercules"):
Arranged for disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Hercules sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #15024 (5/11/88) [Q-1]: Hercules paid Chemclene \$2,742.75 to dispose of 3 drums of waste acetone and methanol, and 6 drums of waste sodium hydroxide.
- * Evidence reflects approximately 38 other similar transactions.
- * Other hazardous substances include: waste water soluble oil, waste mixed flammable, waste 1,1,1-trichloroethane, waste barium sulfate sludge.

R. John Evans & Sons ("John Evans"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * John Evans sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8308 (12/22/80) [R-1]: John Evans paid Chemclene \$120.00 to remove 3 drums of waste perchlorethylene for processing and disposal.
- * Invoice suggests processing.
- * Evidence reflects approximately 55 other similar transactions.
- * Other hazardous substances include: waste trichloroethylene; and waste water, methanol, acetone, MEK.

(2) Arranger because:

- * John Evans sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site.

Evidence:

- * Chemclene receipt (4/26/79) (attached to Chemclene Invoice #7502) [R-2]: John Evans sold 16 drums (8,647 lbs.) of waste perchlorethylene to Chemclene of which Chemclene recovered 5,765 lbs. John Evans received \$172.95 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects two other similar transactions.

(3) Arranger because:

- * John Evans sent hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene receipt (4/26/79) (attached to Chemclene Invoice #7502) [R-2]: John Evans sold 16 drums (8,647 lbs.) of waste perchlorethylene to Chemclene of which Chemclene recovered 5,765 lbs. John Evans received \$172.95 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects two other similar transactions.

S. Kawecky Berylco ("Kawecky"): Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Kawecky sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8118 (8/27/80) [S-1]: Kawecky was charged \$1,062.50 by Chemclene to dispose of 17 drums of chlorinated still bottoms produced from the reclamation of 64 drums of Kawecky's waste.
- * Evidence reflects one other similar transaction.

(2) Arranger because:

- * Kawecky sold hazardous substances to Chemclene and arranged for both the disposal and treatment of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Receipt (8/27/80) (attached to Chemclene Invoice #8118) [S-1]: Kawecky sold 21 drums (9,034 lbs.) of waste 1,1,1-trichloroethane to Chemclene of which Chemclene recovered 6,775 lbs. Distillation produced 2 drums of still bottoms. Kawecky received \$203.00 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects 6 other similar transactions.

(3) Arranger because:

- * Kawecky sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (8/27/80) (attached to Chemclene Invoice #8118) [S-1]: Kawecky sold 21 drums (9,034 lbs.) of waste 1,1,1-trichloroethane to Chemclene of which Chemclene recovered 6,775 lbs. Distillation produced 2 drums of still bottoms. Kawecky received \$203.00 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects 6 other similar transactions.

T. **Kim Manufacturing:** Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Kim Manufacturing sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #16042 (11/29/89) [T-1]: Kim Manufacturing paid Chemclene \$1,215.50 to remove 13 drums of waste 1,1,1-trichloroethane for "processing and disposal."
- * Invoice suggests processing.
- * Evidence reflects 115 other similar transactions.

(2) Arranger because:

- * Kim Manufacturing sent hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Invoice #16042 (11/29/89) [T-1]: Kim Manufacturing paid Chemclene \$1,215.50 to remove 13 drums of waste 1,1,1-trichloroethane for "processing and disposal."
- * Invoice suggests processing.
- * Evidence reflects 115 other similar transactions.

U. **LaFrance Precision ("LaFrance")**: Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * LaFrance sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8459 (3/20/81) [U-1]: LaFrance paid Chemclene \$120.00 for the removal of 4 drums of waste trichloroethylene for processing and disposal at the site.
- * Evidence reflects approximately 83 other similar transactions.

(2) Arranger because:

- * LaFrance sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene receipt (8/7/80) (attached to Chemclene Invoice #8091) [U-2]: LaFrance sold 7 drums (3,568 lbs.) of dirty trichlorethylene to Chemclene. Chemclene recovered 2,784 lbs. LaFrance was credited \$83.52.
- * Receipt suggests processing.
- * Evidence reflects approximately 18 other similar transactions.

(3) Arranger because:

- * LaFrance sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene receipt (8/7/80) (attached to Chemclene Invoice #8091) [U-2]: LaFrance sold 7 drums (3,568 lbs.) of dirty trichlorethylene to Chemclene. Chemclene recovered 2,784 lbs. LaFrance was credited \$83.52.
- * Receipt suggests processing.
- * Evidence reflects approximately 18 other similar transactions.

V. Morning Call: Arranged for disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Morning Call sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #14950 (4/5/88) [V-1]: Morning Call paid Chemclene \$2,415.00 to remove 23 drums of waste petroleum naptha and ink for disposal.
- * Evidence reflects 24 other similar transactions.
- * Other hazardous substances include: waste combustible liquid; and waste mineral spirits and ink.

W. NW Controls: Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * NW Controls sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8365 (1/30/81) [W-1]: NW Controls paid Chemclene \$90.00 to remove 3 drums of waste trichloroethylene for treatment and disposal.
- * Evidence reflects 93 other similar transactions.

(2) Arranger because:

- * NW Controls sold hazardous substances to Chemclene and arranged for both the disposal and treatment of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene receipt (8/11/77) (attached to Chemclene Invoice #6740) [W-2]: NW Controls sold 4 drums (2,335 lbs.) of waste trichlorethylene to Chemclene. Chemclene recovered 2,060 lbs. NW Controls received \$61.80 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects 18 other similar transactions.

(3) Arranger because:

- * NW Controls sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene receipt (8/11/77) (attached to Chemclene Invoice #6740) [W-2]: NW Controls sold 4 drums (2,335 lbs.) of waste trichlorethylene to Chemclene. Chemclene recovered 2,060 lbs. NW Controls received \$61.80 credit from Chemclene.
- * Receipt suggests processing.
- * Evidence reflects 18 other similar transactions.

X. **Plymouth Tube ("Plymouth"):** Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Plymouth sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8018 (6/19/80) [X-1]: Plymouth paid Chemclene \$1,200.00 for the disposal of still bottoms produced from the reclamation of Plymouth's waste trichloroethylene.
- * Evidence reflects approximately 24 other similar transactions.

(2) Arranger because:

- * Plymouth sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Receipt (6/19/80) (attached to Chemclene Invoice #8018) [X-1]: Plymouth sold 8 drums (4,280 lbs.) of waste trichloroethylene to Chemclene. Two drums of still bottoms were produced from the reclamation of this material which were disposed of at the site. Chemclene recovered 2,542 lbs. Plymouth was credited \$76.26.
- * Receipt suggests processing.
- * Evidence reflects approximately 16 other similar transactions.

(3) Arranger because:

- * Plymouth sent hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (6/19/80) (attached to Chemclene Invoice #8018) [X-1]: Plymouth sold 8 drums (4,280 lbs.) of waste trichloroethylene to Chemclene. Two drums of still bottoms were produced from the reclamation of this material which were disposed of at the site. Chemclene recovered 2,542 lbs. Plymouth was credited \$76.26.
- * Receipt suggests processing.
- * Evidence reflects approximately 16 other similar transactions.

Y. **Porter Instruments ("Porter")**: Arranged for disposal of hazardous substances. § 9607(a)(3)

(1) Arranger because:

- * Porter sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #17081 (7/29/91) [Y-1]: Porter paid Chemclene \$1,831.50 to remove 4 drums of waste water soluble oil and 2 drums of waste trichloroethylene for disposal.
- * Evidence reflects approximately 48 other similar transactions.

- Z. Quaker City Chemicals ("Quaker"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * Quaker sold hazardous substances to Chemclene and arranged to both treat and dispose its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Invoice #6677 dated 6/20/77 [Z-1]: Quaker sold 7 drums(4,168 lbs.) of 1,1,1-trichloroethane to Chemclene. Chemclene recovered 300 gallons (3,296 lbs.) Quaker was credited \$150.00.
- * Evidence reflects approximately 44 other similar transactions.
- * Other hazardous substances include: trichlorethylene, perchlorethylene, methylene chloride.

(2) Arranger because:

- * Quaker sold hazardous substances to Chemclene which required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Invoice #6677 [Z-1]: Quaker sold 7 drums(4,168 lbs.) of 1,1,1-trichloroethane to Chemclene. Chemclene recovered 300 gallons (3,296 lbs.) Quaker was credited \$150.00.
- * Invoice suggests processing.
- * Evidence reflects approximately 44 other similar transactions.
- * Other hazardous substances include: trichlorethylene, perchlorethylene, methylene chloride.

AA. Reilly Plating Company, Inc. ("Reilly"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * Reilly sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Receipt (3/3/79) [AA-1]: Reilly sold 12 drums (3,631 lbs.) of waste trichlorethylene and 21 drums (9,220 lbs.) of waste M-Clene-D to Chemclene. Chemclene recovered 3,631 lbs. of trichlorethylene and 3,752 lbs. of M-Clene-D. Reilly received a check in the amount of \$221.51 from Chemclene.
- * Evidence reflects approximately 9 other similar transactions.
- * Receipt suggests processing.

(2) Arranger because:

- * Reilly sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (3/3/79) [AA-1]: Reilly sold 12 drums (3,631 lbs.) of waste trichlorethylene and 21 drums (9,220 lbs.) of waste M-Clene-D to Chemclene. Chemclene recovered 3,631 lbs. of trichlorethylene and 3,752 lbs. of M-Clene-D. Reilly received a check in the amount of \$221.51 from Chemclene.
- * Evidence reflects approximately 9 other similar transactions.
- * Receipt reflects processing.

BB. Resource Technology Services, Inc. ("RTS"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * RTS sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8663 (6/26/81) [BB-1]: RTS paid Chemclene \$252.29 to dispose of 6.64 drums of chlorinated still bottoms at the site.
- * Evidence reflects 23 other similar transactions.
- * Other hazardous substances include: perchlorethylene, methylene chloride, 1,1,1-trichloroethane, trichlorethylene and Freon.

(2) Arranger because:

- * RTS sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the Site. Pesses.

Evidence:

- * Chemclene Receipt (4/26/80) [BB-2]: RTS sold 2 drums (1,070 lbs.) of dirty 1,1,1-trichloroethane to Chemclene. Chemclene recovered 726 lbs. RTS received a check (#10276) for \$21.78.
- * Receipt suggests processing.
- * Evidence reflects approximately 8 other similar transactions.
- * Other hazardous substances include: perchlorethylene and methylene chloride.

(3) Arranger because:

- * RTS sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (4/3/81) [BB-3]: RTS sold 20 drums of used perchlorethylene to Chemclene. Chemclene recovered 10,776 lbs. RTS received \$323.28 for recovered perchlorethylene.
- * Receipt suggests processing.
- * Evidence reflects approximately 8 other similar transactions.
- * Other hazardous substances include: 1,1,1-trichloroethane and methylene chloride.

CC. **SKF Industries:** Arranged for disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * SKF Industries sent hazardous substances to Chemcene to be disposed of at the site. Wade.

Evidence:

- * Chemcene Invoice #11580 (10/4/83) [CC-1]: SKF Industries paid Chemcene \$200.00 to remove 2 drums of waste alcohol and 4 drums of waste 1,1,1-trichloroethane for disposal.
- * Evidence reflects approximately 14 other similar transactions.
- * Other hazardous substances include: waste asbestos, waste oil and barium, waste Freon, waste sulfuric acid, and waste petroleum naptha.

DD. Samuel Miller and Sons ("Samuel Miller"): Arranged for disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Samuel Miller sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #10885 (11/19/82) [DD-1]: Samuel Miller paid Chemclene \$100.00 to dispose of 5 drums of waste 1,1,1-trichloroethane.
- * Evidence reflects approximately 16 other similar transactions.
- * Other hazardous substances include: waste trichloroethylene, waste perchlorethylene and waste Freon.

EE. Simon Wrecking Company ("Simon"): Arranged for disposal of hazardous substances. § 9607(a)(3)

(1) Arranger because:

- * Simon sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Ticket #1783 & #1786 [EE-1]: Simon paid Chemclene to dispose of 160 drums of dirty trichlorethylene.
- * Evidence reflects approximately 10 other similar transactions.

FF. Star Dental Corporation ("Star"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger Because:

- * Star sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Invoice #6630 (5-11-77) [H1]: Star sold 3 drums (1,529 lbs.) of trichlorethylene to Chemclene. Chemclene recovered 1,212 lbs. Star was credited \$0.03/lb. equaling \$36.36.
- * Invoice suggests processing.
- * Evidence reflects approximately 35 other similar transactions.
- * Other hazardous substances include: waste oil, waste chlorinated solvent, waste 1,1,1-trichloroethane, perchlorethylene.

(2) Arranger Because:

- * Star sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Invoice #6630 (5-11-77) [H1]: Star sold 3 drums (1,529 lbs.) of trichlorethylene to Chemclene. Chemclene recovered 1,212 lbs. Star was credited \$0.03/lb. equaling \$36.36.
- * Invoice suggests processing.
- * Evidence reflects approximately 35 other similar transactions.
- * Other hazardous substances include: waste oil, waste chlorinated solvent, waste 1,1,1-trichloroethane, perchlorethylene.

GG. Vishay Resistive Systems ("Vishay"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * Vishay sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #14583 (9/18/87) [GG-1]: Vishay paid Chemclene \$569.25 to remove 5 drums of waste xylene, butyl acetate and methanol, and 1 drum of waste 1,1,1-trichloroethane for processing and/or disposal.
- * Invoice suggests processing.
- * Evidence reflects 37 other similar transactions.
- * Other hazardous substances include: waste mixed flammable, waste oil, and waste photo-resist stripper.

5 .

HH. VIZ Manufacturing Corporation ("VIZ"): Arranged for both treatment and disposal of hazardous substances.
§ 9607(a)(3).

(1) Arranger because:

- * VIZ sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #6547 (3/11/77) [HH-1]: VIZ paid Chemclene \$678.19 for reclamation/disposal of 423.5 standard gallons of dirty 1-1-1 trichloroethane.
- * Evidence reflects approximately 46 other similar transactions.

(2) Arranger because:

- * VIZ sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Receipt (7/28/77) (attached to Chemclene Invoice #6718) [HH-2]: VIZ sold 13 drums of waste 1,1,1-trichloroethane and waste trichlorethylene to Chemclene. Chemclene recovered 6,926 lbs. VIZ was credited \$69.26.
- * Evidence reflects approximately 7 other similar transactions.

(3) Arranger because:

- * VIZ sold hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (7/28/77) (attached to Chemclene Invoice #6718) [HH-2]: VIZ sold 13 drums of waste 1,1,1-trichloroethane and waste trichlorethylene to Chemclene. Chemclene recovered 6,926 lbs. VIZ was credited \$69.26.
- * Receipt suggests processing.
- * Evidence reflects approximately 7 other similar transactions.

II. Western Electric ("Western"): Arranged for both treatment and disposal of hazardous substances. § 9607(a)(3).

(1) Arranger because:

- * Western sent hazardous substances to Chemclene to be disposed of at the site. Wade.

Evidence:

- * Chemclene Invoice #8053 (7/9/80) [II-1]: Western paid Chemclene \$6,360 to dispose of 80 drums of waste trichlorethylene and chlorinated still bottoms.
- * Evidence reflects 4 other similar transactions.

(2) Arranger because:

- * Western sold hazardous substances to Chemclene and arranged to both treat and dispose of its hazardous substances at the site. Pesses.

Evidence:

- * Chemclene Receipt (1/6/78) [II-2]: Western sold 22 drums (13,438 lbs.) of waste trichloroethylene to Chemclene. Chemclene recovered 9,393 lbs. Chemclene paid Western \$281.79.
- * Receipt suggests processing.
- * Evidence reflects approximately 81 other similar transactions.

(3) Arranger because:

- * Western sent hazardous substances to Chemclene which necessarily required processing in order to be productively used. Maryland Sand.

Evidence:

- * Chemclene Receipt (2/14/78) [II-3]: Western sold 20 drums (10,858 lbs.) of trichlorethylene to Chemclene. Chemclene recovered 7,393 lbs. Chemclene paid Western \$221.80.
- * Receipt suggests processing.
- * Evidence reflects approximately 81 other similar transactions.